



WELCOME TO 2022 305(B)/303(D)PUBLIC MEETING

MARCH 7, 2022 (1:00 PM)

- Please note that everyone is entering the meeting with their microphones muted.
- Please **keep your microphone muted** except when you are speaking. This will help us minimize background noise and feedback.
- Please take a moment to **open the Participants List and rename yourself** to show your full name and affiliation, so we have that for our records. You should see a “Rename” option next to your name (or click on “More” to find this option).
- **This meeting is being recorded** to document any questions or comments received during our time together.
- To make a comment or ask a question, please either:
 - Indicate you would like to make a comment using the Chat feature.
 - In the “Reactions” menu, select the “Raise Hand” option. The host will call on you to ask your question or make your comment.



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

2022 Draft 305(b)/303(d) List

Susan Salter
Environmental Specialist

Public Meeting
March 7, 2022



PURPOSE OF MEETING

- Hold an informal discussion on the draft 2022 305(b)/303(d) list and answer questions
- Discuss current and new Long-Term Vision for Assessment, Restoration, and Protection of waters under the Clean Water Act Section 303(d) Program
- Receive comments from the public





MEETING AGENDA

Part 1 – 2022 305(b)/303(d) List

- Describe development of the 305(b)/303(d) List of Waters
- Provide summary/highlights of the draft 2022 List
- Provide a timeline for the 2022 List
- Answer questions and receive comments from the public



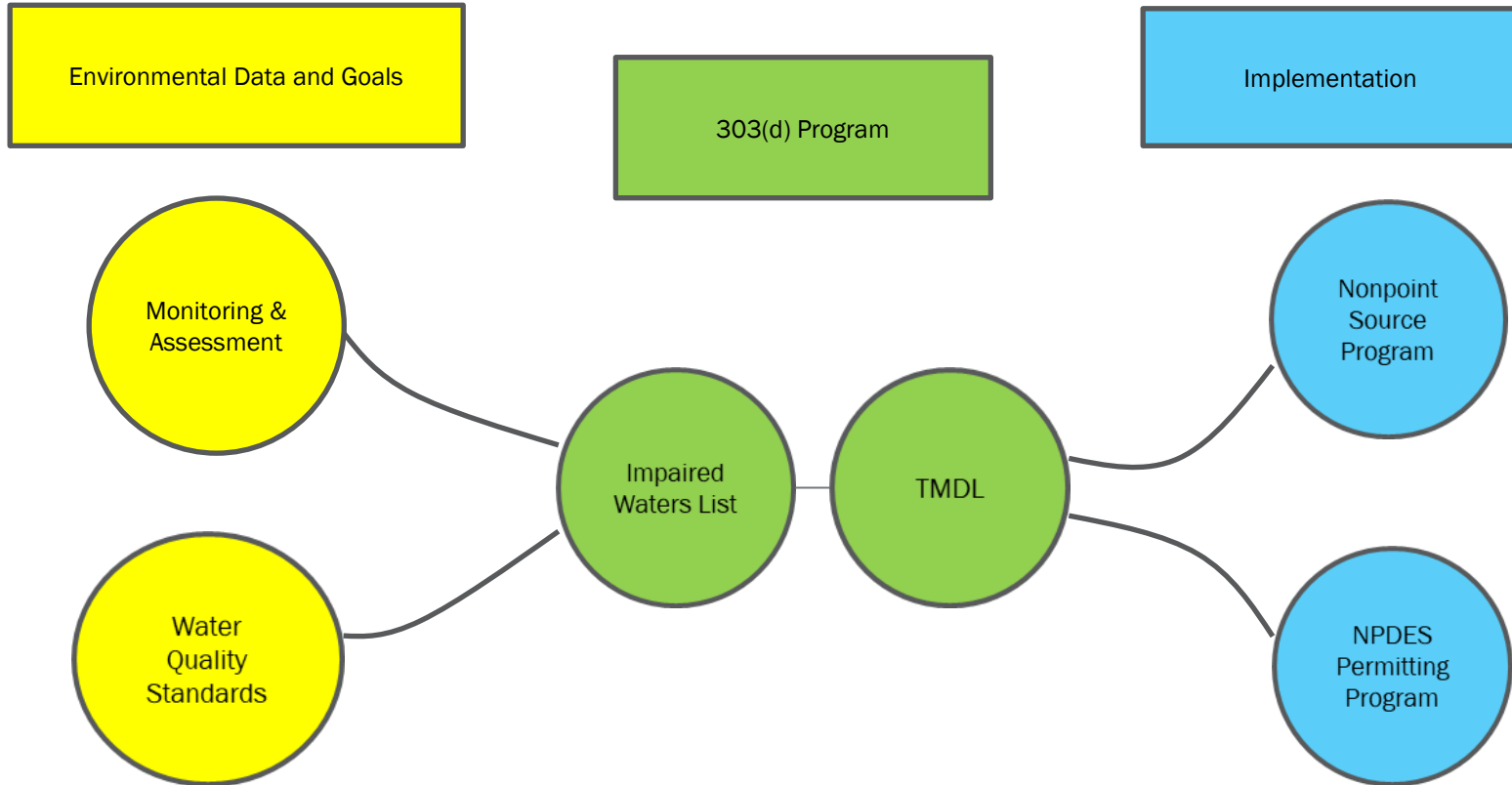
MEETING AGENDA

Part 2 – Long-Term Vision

- Describe the Long-Term Vision Process
- Describe results of the first Vision Period
- Describe the second Vision Period
- Describe the Bridge Period
- Take comments and answer questions



HOW THE 303(D) PROGRAM FITS





WHAT ARE 305B AND 303D

- The 305(b) report and 303(d) list are 2 separate requirements under the Clean Water Act
- Georgia submits an Integrated Report (305(b)/303(d) contained in one document)
- 305(b) Required by Section 305(b) of the Clean Water Act and by [40 CFR 130.8](#)
- 303(d) List is required by Section 303(d) of the Clean Water Act and by [40 CFR 130.7](#)



THE 305B REPORT

- Describes the quality of all the waters of the State (those supporting uses and not supporting uses)
- Includes Chapters on:
 - Regional Water Planning
 - Water Quality Monitoring and Assessment Program
 - Wetlands Program
 - Estuary and Coastal Program
 - Public Health/Aquatic Life Issues
 - Groundwater and Water Withdrawal Programs
- 305(b)/303(d) list of waters – which is a list of all the assessed waters
- Due to EPA even numbered years



THE 303D LIST

- Composed of waters that are “Not Supporting” their uses and for which a Total Maximum Daily Load (TMDL) has not been done and needs to be completed
- Subset of “Not Supporting” waters (**Category 5**)
- The list is to be submitted to EPA by April 1st of every even numbered year



DRAFT 2022 305(b)/303(d) LIST OF WATERS





ASSESSMENT OF STATE WATERS

- Water quality data gathered from various sources
- Water quality standards ([Rules and Regulations 391-3-6-.03](#))
 - Designated Uses (Coastal Fishing; Fishing, Recreation, Drinking Water)
 - Water quality criteria (Numeric and Narrative)
- [Listing Assessment Methodology](#)
 - Supporting
 - Not Supporting
 - Assessment Pending



ASSESSMENT CATEGORY DETAILS

Category		Category Description	Global Attainment Category
Category 1		Data indicate that waters are meeting their designated use(s).	Supporting
Category 2		A waterbody has more than one designated use and data indicate that at least one designated use is being met, but there is insufficient evidence to determine whether all uses are being met.	Assessment Pending
Category 3		There is insufficient data/information to make a determination as to whether or not the designated use(s) is being met.	
Category 4	4a	Data indicate that at least one designated use is not being met, but a TMDL(s) has been completed for the parameter(s) that is causing a waterbody not to meet its use(s).	Not Supporting
	4b	Data indicate that at least one designated use is not being met, but there are actions in place (other than a TMDL) that are predicted to lead to compliance with water quality standards.	
	4c	Data indicate that at least one designated use is not being met, but the impairment is not caused by a pollutant.	
Category 5		Data indicate that at least one designated use is not being met and TMDL(s) need to be completed for one or more pollutants.	



DATA SOURCES FOR 2022 LIST

- Data were submitted by the following:
 - State Agencies
 - EPD – Environmental Protection Division
 - WRD – Wildlife Resources Division
 - CRD – Coastal Resources Division
 - PRHSD - Parks, Recreation and Historic Sites Division
 - Federal Agencies (USGS – U.S. Geological Survey)
 - Local Governments (Cherokee Co., Columbus Consolidated Govt, Gwinnett Co.)
 - NGOs (Chattahoochee Riverkeeper)
 - Woodruff & Howe Environmental Engineering



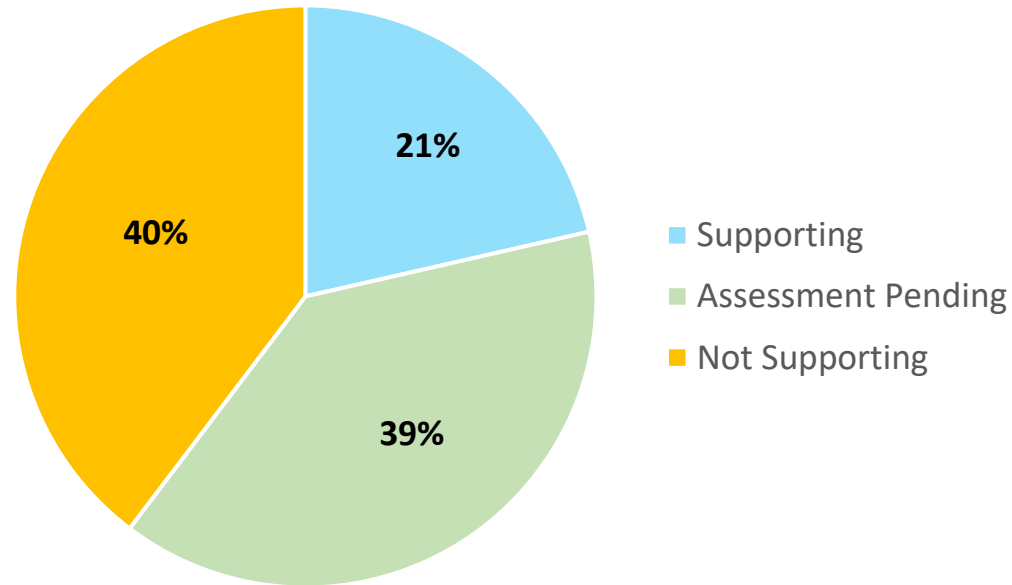
NEWLY ASSESSED WATERS





DRAFT 2022 LIST SUMMARY

- 126 newly assessed waters
 - 27 waters were Supporting
 - 49 waters were Assessment Pending (DO, pH)
 - 50 waters were Not Supporting (Fish Tissue, Fecal Coliform, Bio F, pH, metals)





NEW DATA ASSESSED FOR 819 WATERS– INCLUDES NEWLY ASSESSED WATERS AND EXISTING WATERS





IMPAIRMENTS ADDED AND REMOVED BASED ON NEW OR REEVALUTED DATA

Pollutant	Added 2022	Removed 2022
Bacteria (FC, <i>E. coli</i> , Enterococci)	70	19
Bio F	31	2
DO	10	7
pH	20	5
Metals (Cu, Pb, Zn, Se, As)	13	4
Pollutants in Fish Tissue	140	8
Chlorophyll a	4	0
Ammonia Toxicity	2	1
Total Phosphorus	1	0



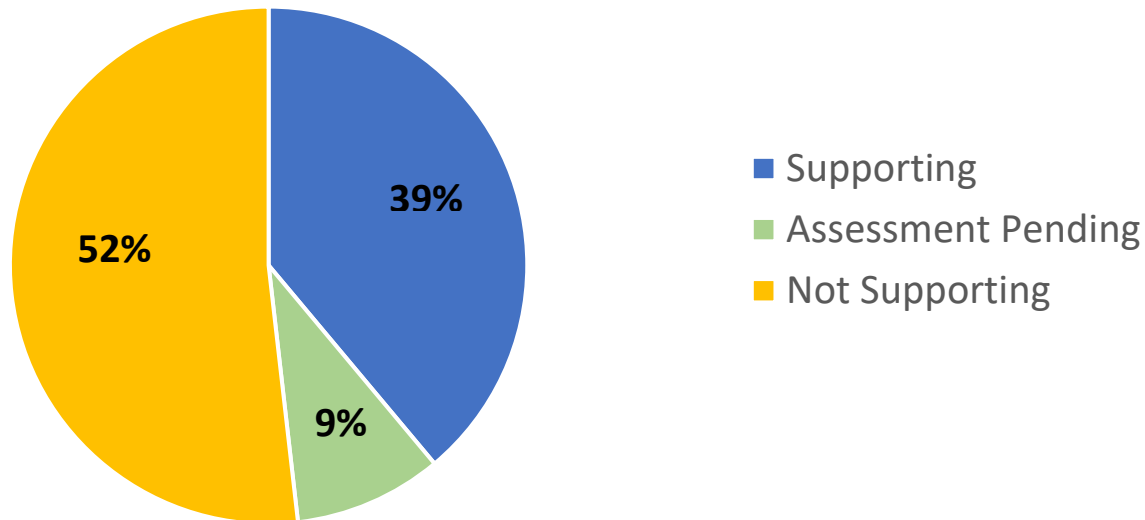
OVERALL SUMMARY OF THE 2022 LIST OF WATERS





DRAFT 2022 LIST SUMMARY

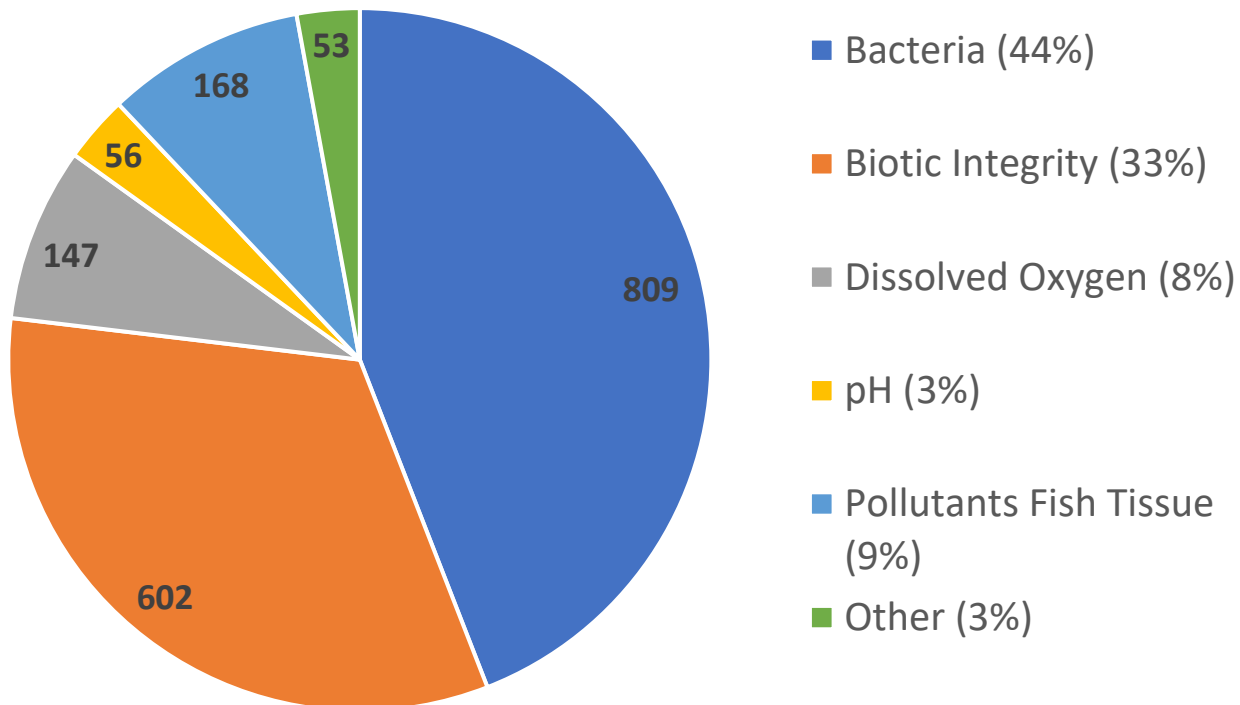
- 2,976 waters assessed
 - 1,158 Supporting
 - 1,542 Not Supporting
 - 276 Assessment Pending





IMPAIRMENTS FOR NOT SUPPORTING STREAMS

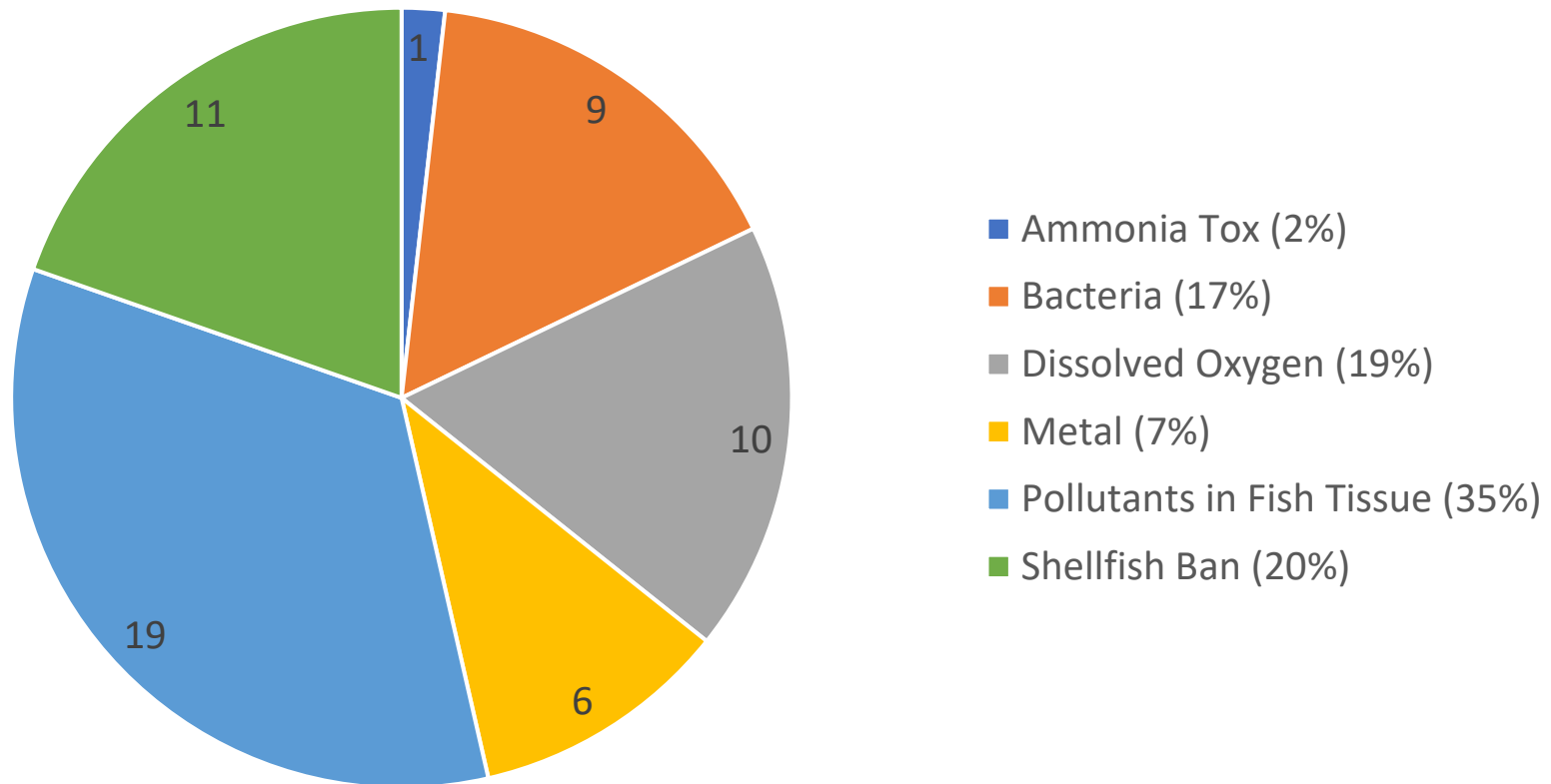
Streams impaired for each parameter





IMPAIRMENTS FOR NOT SUPPORTING COASTAL STREAMS

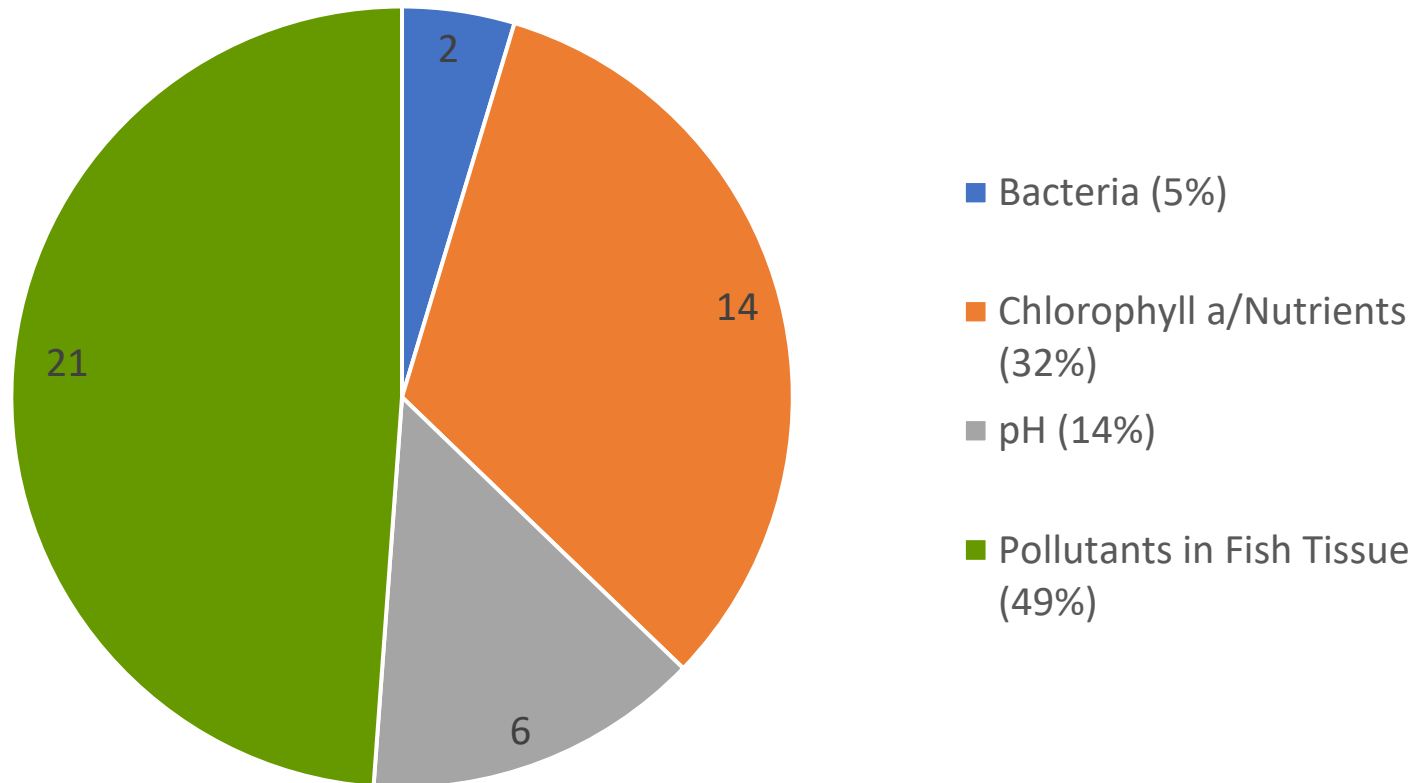
Coastal Streams impaired for each parameter





IMPAIRMENTS FOR NOT SUPPORTING LAKES

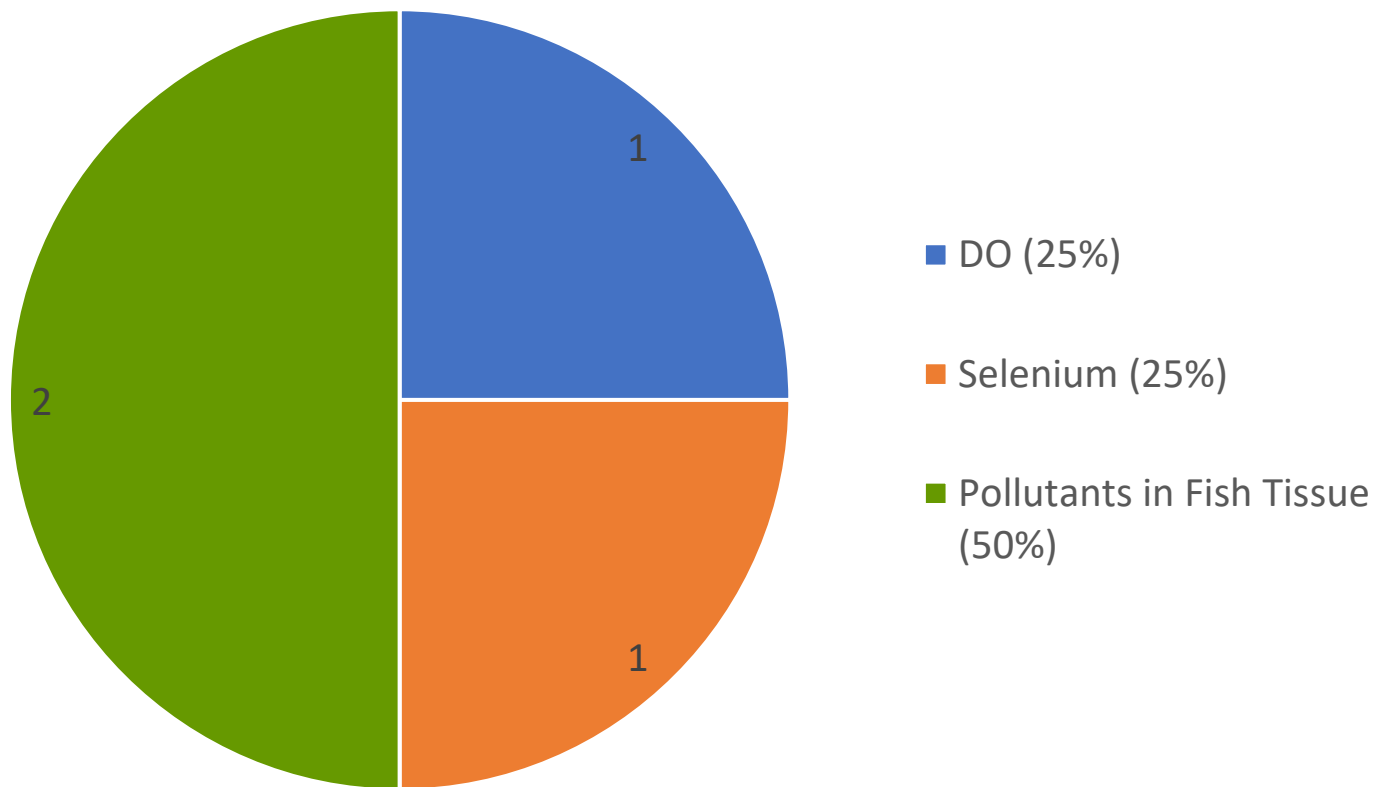
Lakes Impaired for each parameter





IMPAIRMENTS FOR NOT SUPPORTING SOUNDS/HARBORS

Sounds/Harbors impaired for each parameter





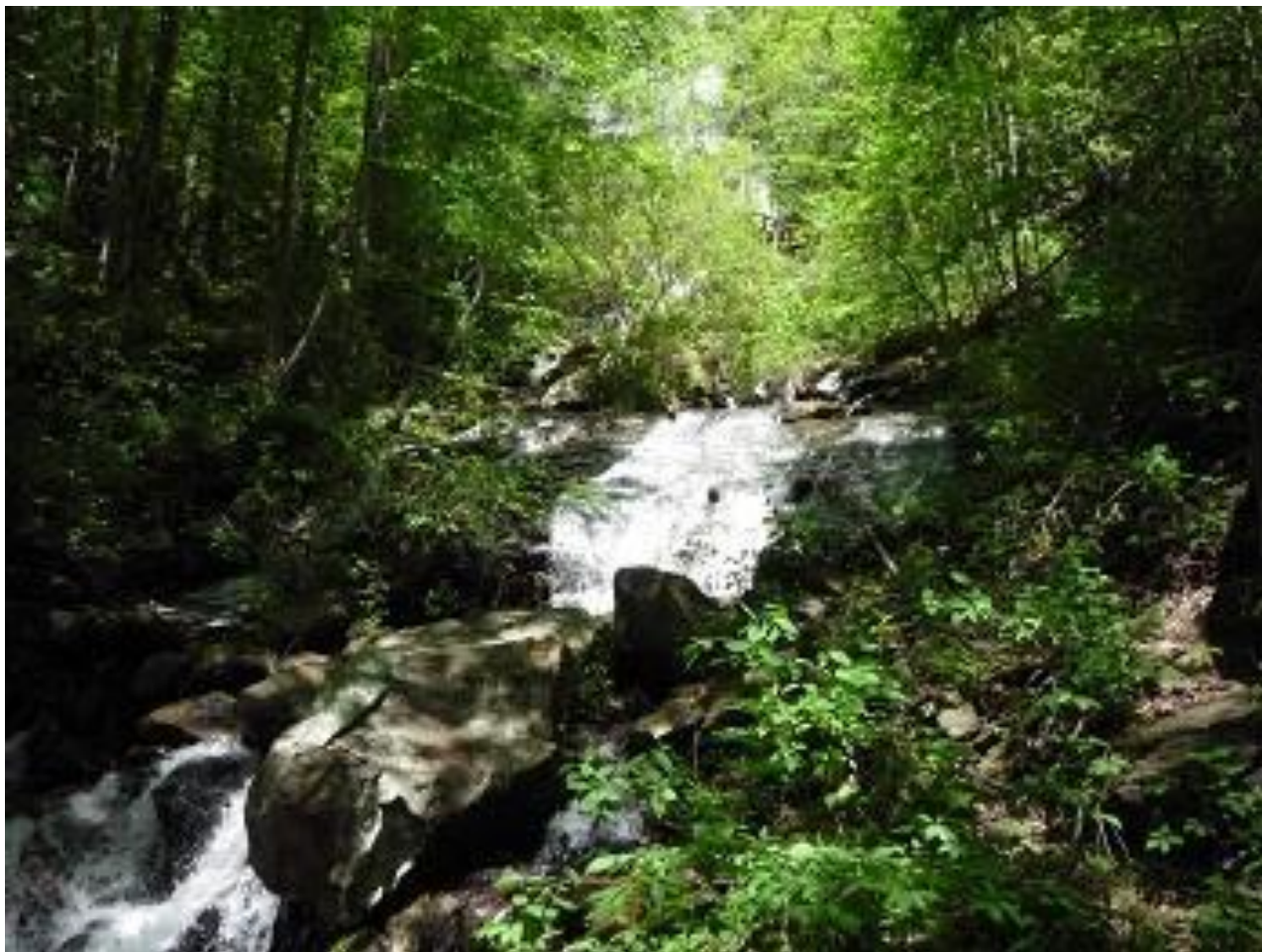
IMPAIRMENTS FOR NOT SUPPORTING BEACHES (FRESHWATER AND COASTAL)

- 100 percent of Impairments are for Bacteria





HIGHLIGHTS OF DRAFT 2022 LIST





HIGHLIGHTS OF DRAFT 2022 LIST

- Changes to Chlorophyll *a* listing for Lakes
- Changes to Bacteria listings on Recreational Waters
- Reevaluation of Fish Tissue Data
- Updates made to GIS, stream names, locations, size
- Altamaha River Assessment



CHANGES TO CHLOROPHYLL A LISTINGS FOR LAKES

- **Two Lake Sections Moved from Supporting to Category 3**
 - Lake Jackson (Tussahaw Creek, South River, Yellow River, and Alcovy River Arms)
 - Allatoona Lake (Dam Pool)

- **Four Lake Sections Moved from Assessment Pending (Category 3) to Not Supporting**
 - Walter F. George (Dam Pool)
 - Lake Allatoona (Etowah River Arm)
 - Carters Lake (Coosawatte River Embayment)
 - Carters Lake (US Woodring Branch/Midlake)



SUMMARY OF GROWING SEASON AVERAGES

Lake	Standard Station	Chlorophyll a Std. ug/L	2017 Average	2018 Average	2019 Average	2020 Average	2021 Average	Changed Assessment 2020 to 2022
Allatoona	US Dam Forebay	10	10	7	10	10	11	Supporting to Category 3
Allatoona	Allatoona Creek Arm	12	14	14	13	12	10	
Allatoona	Midlake DS Kellogg	10	11	9	11	11	10	
Allatoona	Little River US Hwy 205	15	18	17	25	27	21	
Allatoona	Etowah, US Sweetwater	14	14	13	19	20	15	Category 3 to Not Supporting
Carters	US Woodring Br., Midlake	10	4	7	13	8	12	Category 3 to Not Supporting
Carters	Coosawattee Embayment Mouth	10	7	7	11	11	10	Category 3 to Not Supporting
Jackson	2 mi. DS South/Yellow, Midlake	20	17	14	17	23	17	Supporting to Category 3



SUMMARY OF GROWING SEASON AVERAGES

Lake	Standard Station	Chlorophyll a Std. ug/L	2017 Average	2018 Average	2019 Average	2020 Average	2021 Average	Changed Assessment 2020 to 2022
Lanier	Dam Forebay	5	5	6	9	7	5	
Lanier	US Flowery Br.	6	5	7	13	9	7	
Lanier	Browns Bridge	7	6	9	14	12	10	
Lanier	Bolling Bridge	10	7	11	14	13	11	
Lanier	Lanier Bridge	10	10	12	14	16	13	
W.F. George	Midlake Hwy 82	18	23	22	27	19	22	
W.F. George	Dam Forebay	15	14	21	15	19	15	Category 3 to Not Supporting
West Point	LaGrange Intake	24	18	16	21	19	20	
West Point	Upstream Forebay	22	10	11	14	12	16	



CHANGES TO LISTINGS FOR BACTERIA IN RECREATIONAL WATERS

- Waters where *E. coli* or enterococci have been added
 - Jekyll Island – Driftwood Beach
 - Saint Simons Island – Massengale Park Beach
 - Toccoa River – Big Creek to Lake Blue Ridge
 - Hard Labor Creek State Park – Camp Daniel Morgan Beach
 - West Point Lake





CHANGES TO LISTINGS FOR BACTERIA IN RECREATIONAL WATERS

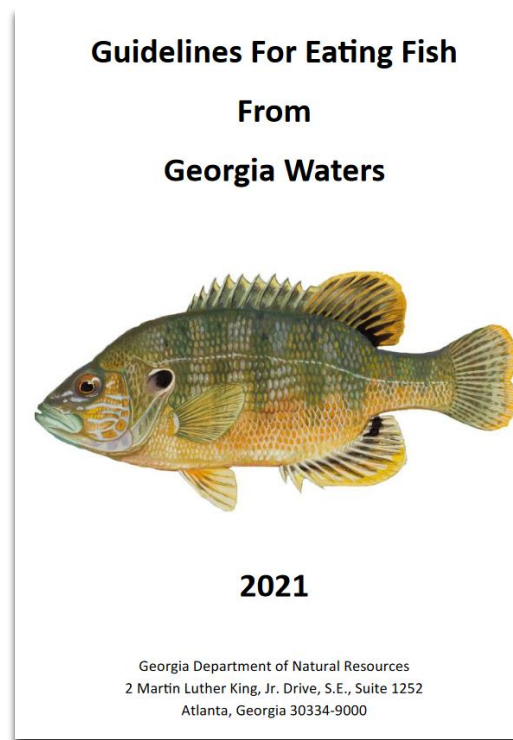
- Waters where *E. coli* has been removed
 - Nottely River (Right/Left Forks to Allison Branch)
- Waters where *E. coli* was moved from Category 3 to Supporting
 - Rocky Mountain Public Fishing Area (State Park) Beach
 - Chattahoochee River (Buford Dam to Dicks Creek)



CHANGES IN FISH TISSUE LISTINGS

Pollutants in fish tissue are assessed in different ways depending upon the pollutant

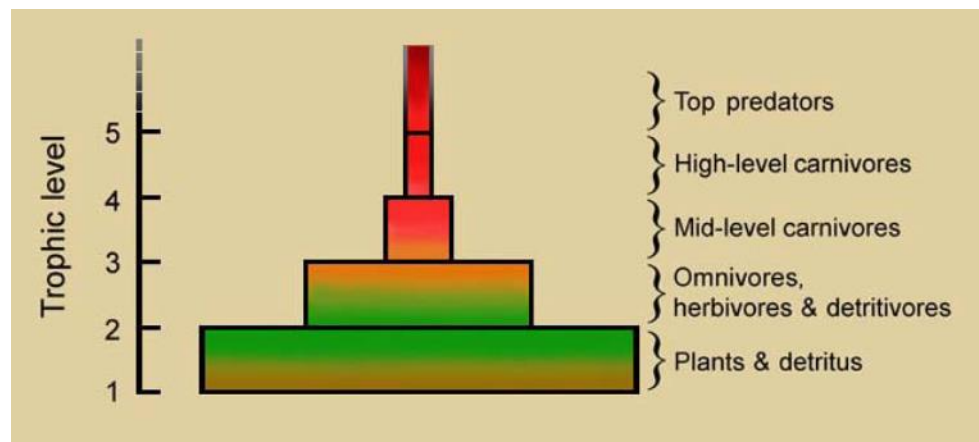
- All pollutants other than Mercury are assessed based on the listings in the [“Guidelines for Eating Fish from Georgia Waters”](#) booklet.
- If the booklet contains any consumption restrictions (e.g. once a week, once a month, do not eat) then the water is listed as impaired.





CHANGES IN FISH TISSUE LISTINGS

- Georgia has a specific criteria for mercury in fish tissue (0.3 mg/kg) trophic-weighted residue value.
- Trophic-weighted residue concentration is calculated for each site.
 - 0 - 0.24 mg/kg (Supporting)
 - 0.25 – 0.30 mg/kg (Category 3 – Assessment Pending)
 - > 0.30 mg/kg (Not Supporting)





CHANGES IN FISH TISSUE LISTINGS

- All fish tissue data have been input into our database in the last several years making it easier to access
- All fish tissue data was reevaluated when creating the 2020 and 2021 *Guidelines for Eating Fish from Georgia Waters* booklets leading to several new listings
- The trophic-weighted residue for Mercury in fish tissue was also recalculated for all waters with mercury fish tissue data and this also led to new listings.



CHANGES TO FISH TISSUE LISTINGS

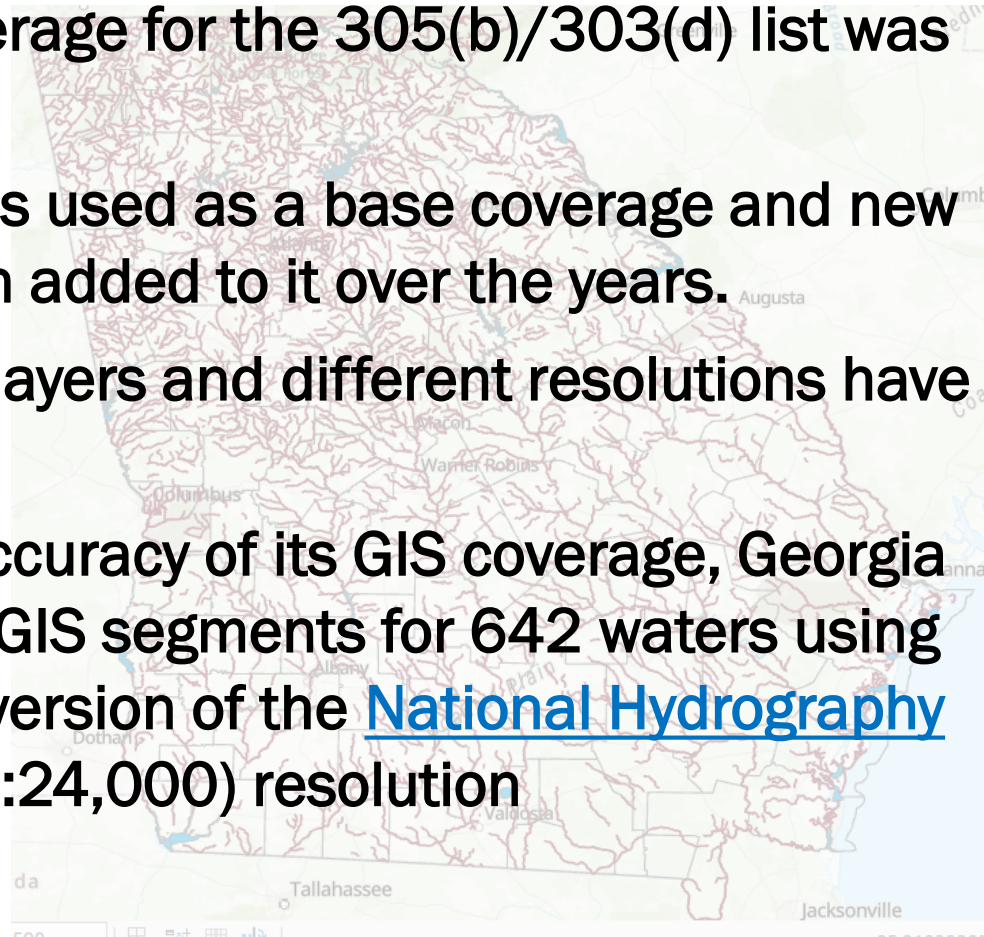
Fish Tissue Parameter	Number of Impairments Added to the 2022(305b)/(303d) List	Number of Impairments Removed from the 2022 (305b/303d) List
Antimony*	9	
Arsenic	6	
Cadmium	1	
Chromium	1	
DDE/DDD		1
Dieldrin	3	1
Heptachlor Epoxide	3	
Mercury	67	1
PCBs	20	4
Selenium	3	
Thallium*	25	
Toxaphene	2	1

*Listings based on older data, more data being collected to confirm listing decision



CHANGES TO GIS, NAMES, LOCATIONS & SIZES

- The first GIS coverage for the 305(b)/303(d) list was created in 2002
- This coverage was used as a base coverage and new waters have been added to it over the years.
- Different source layers and different resolutions have been used
- To improve the accuracy of its GIS coverage, Georgia has redrawn the GIS segments for 642 waters using the most recent version of the [National Hydrography Dataset](#) (NHD) (1:24,000) resolution





CHANGES TO GIS, NAMES, LOCATIONS & SIZES

- Stream names were sometimes changed to match names given in NHD
- Location information was sometimes updated to provide a more accurate description
- Sizes are now being reported to one decimal place (previously rounded to whole number)
- In some cases old GIS coverage was incorrect.
- An [Excel list](#) that shows all the waters with GIS changes is provided on our website.



ASSESSMENT OF ALTAMAHA RIVER BELOW ITT RAYONIER

- Altamaha River (ITT Rayonier to Penholoway Creek) was placed in Category 3 on the 2012 305b/303d List of Waters. Studies needed to determine if discharge from ITT Rayonier was causing impairment of the Fishing use.
- Review of studies conducted indicate that the Fishing use is not being impaired by the discharge.
- This portion of the River is being listed as impaired for Mercury in Fish Tissue





ASSESSMENT OF ALTAMAHA RIVER BELOW ITT RAYONIER

Five study plans (modules) were completed to help determine if uses were being met.

1. Examined the impact of the discharge on the color of the River under two flow scenarios (low and average);
2. Used CORMIX to develop a mixing zone;
3. Conducted a creel survey to determine if the discharge impacts how people use the river;
4. Conducted mussel and fish surveys to determine the distribution and health of aquatic life, and
5. Looked at organoleptic compounds in the river



IMPACT OF THE DISCHARGE ON THE COLOR OF THE RIVER

- Outfall 1 (single port diffuser) – Horizontal mix occurred about 0.2 miles downstream. Under both flow conditions there was little to no increase in color from background
- Outfall 2 (multiport diffuser) – Under low flow conditions, horizontal mix occurred from 0.75 to 1 mile downstream, while under normal flow conditions, it took a little more than a mile.
- Background color levels are 4 times higher during normal flow conditions than low flow conditions
- Under both flow conditions, color levels in Penholoway Creek, a blackwater tributary, are about 2.5 times higher than Altamaha River background color levels
- The discharge from Outfall 2 caused a color increase 3 times above background under low flow conditions.
- The discharge from Outfall 2 caused a color increase of about 15% above background levels under normal flow conditions.



CORMIX TO DEVELOP MIXING ZONE

- The model CORMIX was used to determine the effluent mixing zone from the Rayonier outfalls under low flow and normal flow conditions
- Under low flow conditions, CORMIX was able to accurately model the centerline concentrations for both outfalls.
- Under normal flow conditions, CORMIX model results did not match the near field measured centerline concentrations for either outfall; however, the far field model results (100-200 feet downstream of the outfalls) did match the measured field data well.
- In general, the model matched measured data better for Outfall 1 than Outfall 2.



CREEL SURVEY

- Data was gathered on frequency of use, activities participated in, whether fish caught were consumed, and where people used the Altamaha River.
- 62% of surveys were mailed, the rest were interviews at boat ramps
- The primary uses of the river were fishing and boating, followed by swimming, camping, and picnicking.
- Most eat the fish they catch.
- Jaycee Landing, upstream of the Rayonier Mill is the most used boat ramp on the Altamaha River. There was no difference in the perceived use of the Altamaha River upstream or downstream of Jaycee Landing.
- Over half of the people had nothing negative to say about the river. Things people disliked about the river were trash, lack of access and amenities, and natural hazardous (bugs, snakes, alligators, shallow water, high water). A few respondents did mention the presence of the Mill, but this did not seem to cause them not to use the river.



MUSSEL AND FISH SURVEY

- Historic fish survey data from Georgia's Wildlife Resources Division's (WRD) was examined ~ 25 years
- WRD did a fish survey upstream and downstream from the discharges in 2018
- Little to no difference found between upstream and downstream fish communities





MUSSEL AND FISH SURVEY

- Mussel data from 2003 – 2011 upstream and downstream from the discharges was evaluated.
- 2018 Mussel survey was conducted upstream of Rayonier discharges, between the two outfalls, and downstream of the discharges
- Mussel community found to be similar in all three locations.





ORGANOLEPTIC CHEMICAL ASSESSMENT

- Organoleptic compounds (taste and odor) analyzed in water samples and fish tissue samples upstream and downstream from Rayonier.
- All water concentrations were below National USEPA Criteria for Organoleptic Effects and in some cases were below the detection limits
- Only copper and phenol were measured in fish tissue (based on previous data).
- Fish caught upstream had slightly higher levels of copper than downstream.
- Three samples for fish caught upstream had phenol between detection of reporting limits. All BDL downstream



TIMELINE OF 2022 LIST

- **February 9, 2021 - Public Notice for Submission of Data**
- **July 1, 2021- Deadline for submission of data**
- **February 4, 2022 - Draft List placed on Public Notice**
- **March 7, 2022 – Virtual Public Meeting (Zoom)**
- **March 9, 2022 - End of Comment period**
- **April 1, 2022 (goal) - Submit to EPA**



QUESTIONS/COMMENTS ON DRAFT 2022 LIST

If you want to speak, please “Raise your hand” or put a comment in the “Chat” box.

**If you submit written comments, please
submit them by 4:30 pm March 9, 2022**

Mailing Address

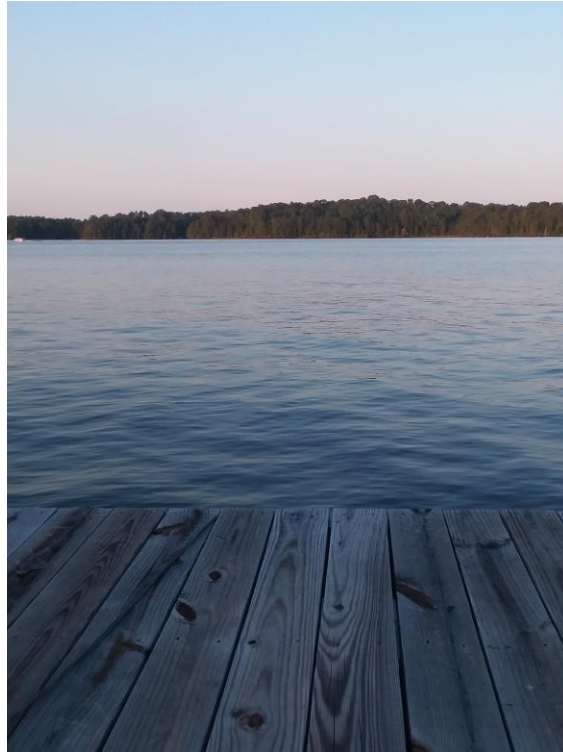
Susan Salter
Watershed Protection Branch
Watershed Planning and Monitoring
Program
2 MLK, Jr. Dr. S.W., Suite 1152 East
Atlanta, GA 30334

Email:
EPD.Comments@dnr.ga.gov (please put
305b/303d in the subject line)





LONG-TERM VISION FOR ASSESSMENT, RESTORATION, AND PROTECTION OF WATERS UNDER THE CLEAN WATER ACT SECTION 303(D) PROGRAM





LONG-TERM VISION PART 1 (FY 2014-2022)

- In December 2013, USEPA released a new [Long-Term Vision](#) for Assessment, Restoration, and Protection of waters under the Clean Water Act Section 303(d) Program.
- Focused on six elements: 1) Prioritization, 2) Assessment, 3) Protection, 4) Alternatives, 5) Engagement, and 6) Integration.
- Each state developed a Priority Framework and a list of priority waters for which the states would have a TMDL, TMDL alternative, or protection plan written for by the end FY 2022.
- Information about the first Vision Period can be found on EPD's 305(b)/303(d) [website](#).



PRIORITY WATERS FOR VISION PART 1

- EPD developed a list of priority waters November 2015
- The list focused TMDLs that were resource intensive
- Focus was also on nutrients, interstate issues, public health
- Implementation efforts included straight to implementation, TMDLs, a TMDL alternative, and a Protection Plan





PRIORITY WATERS FOR VISION PART 1

Priority Water	Pollutant(s)	Mechanism to Protect/Restore	Issue
Lake Lanier	Chlorophyll a	TMDL	Nutrients
Carters Lake	Chlorophyll a & Phosphorus	TMDL	Nutrients
Savannah Harbor	DO	TMDL Alternative (5R)	Interstate Issue
Coosa River (Beach Creek to Stateline)	Temperature	Straight to Implementation	Interstate Issue
Coastal Beaches (Kings Ferry, Reimolds Pasture, Jekyll Clam & St. Andrews)	Enterococci	TMDL	Human Health
Ochlockonee River Basin	Nitrogen & Phosphorus	Protection Plan	Nutrients/Interstate Issue



VISION PART 1 - PROGRESS

- Nutrient TMDLs
 - Lake Lanier – Chlorophyll *a* TMDL approved 2018
 - Carters Lake – Chlorophyll *a* and Phosphorus TMDL approved 2016
- Enterococci TMDLs
 - Kings Ferry – enterococci TMDL approved 2016
 - Reimolds Pasture – enterococci TMDL approved 2017
 - Jekyll Island – Clam Creek and St. Andrews – enterococci TMDL approved 2017





VISION PART 1 - PROGRESS

- Savannah Harbor TMDL Alternative Plan (5R) for DO was developed with SC DHEC and U.S. EPA, and stakeholder group – 2016
- Coosa River – Straight to Implementation - Georgia Power Plant Hammond Permit reissued 2018 and modified 2019 including a WLA for heat loads. Power generation went offline 2019.





VISION PART 1 - PROGRESS

- Ochlockonee River Basin – Nutrient Protection Plan
- Nutrient impairment in Florida (Lake Talquin) – Florida DEP has issued a TMDL (not approved yet)
- Georgia will have to meet TMDL allocation at the State line. EPD will develop nutrient management plans to meet the TMDL allocation
- The Ochlockonee Watershed was removed from Georgia's list of Priority Waters because EPA's mechanism to count completed plans required specific stream segments to be included (as opposed to an entire watershed).





VISION PART 1 - PROGRESS

EPD Completed 100% of the TMDLs or TMDL Alternatives on our Priority List





VISION PART 2 (FY 2025 – 2032)

- EPA is developing new Long-Term Vision Guidance Documents – to be completed Fall 2022.
- States will be developing new Priority Frameworks and pick new Priority Waters as part of the Second Vision Period.
- Stakeholder involvement will be requested once the Final Guidance documents are released by EPA.
- Areas of National Focus during this Vision period are Environmental Justice and Climate Change.
- New Vision Period will run from FY 2025 to 2032



BRIDGE PERIOD (FY 2023-2024)

- The first Vision period ends at the end of FY 2022 and the second does not start until FY 2025
- The period between is called the “Bridge” period
- States will be asked to submit a list of TMDLs, TMDL Alternatives or Protection Plans that they will be working on during this time.





BRIDGE PERIOD (FY 2023-2024)

- The Board of Natural Resources adopted *E. coli* and enterococci as the bacteria criteria in place of fecal coliform for waters with Fishing and Drinking Water uses.
- EPD plans to draft TMDLs for all waters currently in Category 5 for Fecal Coliform on the 2022 305(b)/303(d) list. These TMDLs will also contains TMDL allocations for the new bacteria criteria. 57 will be drafted in FY 2022 and 107 in FY 2023.
- EPD will be submitting addenda for all Fecal Coliform TMDLs that have been completed in the past to address the new bacteria criteria and will provide the appropriate TMDL and WLAs for the new bacteria criteria.



QUESTIONS & COMMENTS

Please submit comments on the 2022 Draft 305(b)/303(d) list in writing by 4:30 pm **March 9, 2022**

Mailing Address

Susan Salter
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